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PHOTOGRAPHIC INTERPRETATION REPORT

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GOLITSYNO
HF COMMUNICATIONS
RECEIVING FACILITY
USSR

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JANUARY 1966

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7 PAGES

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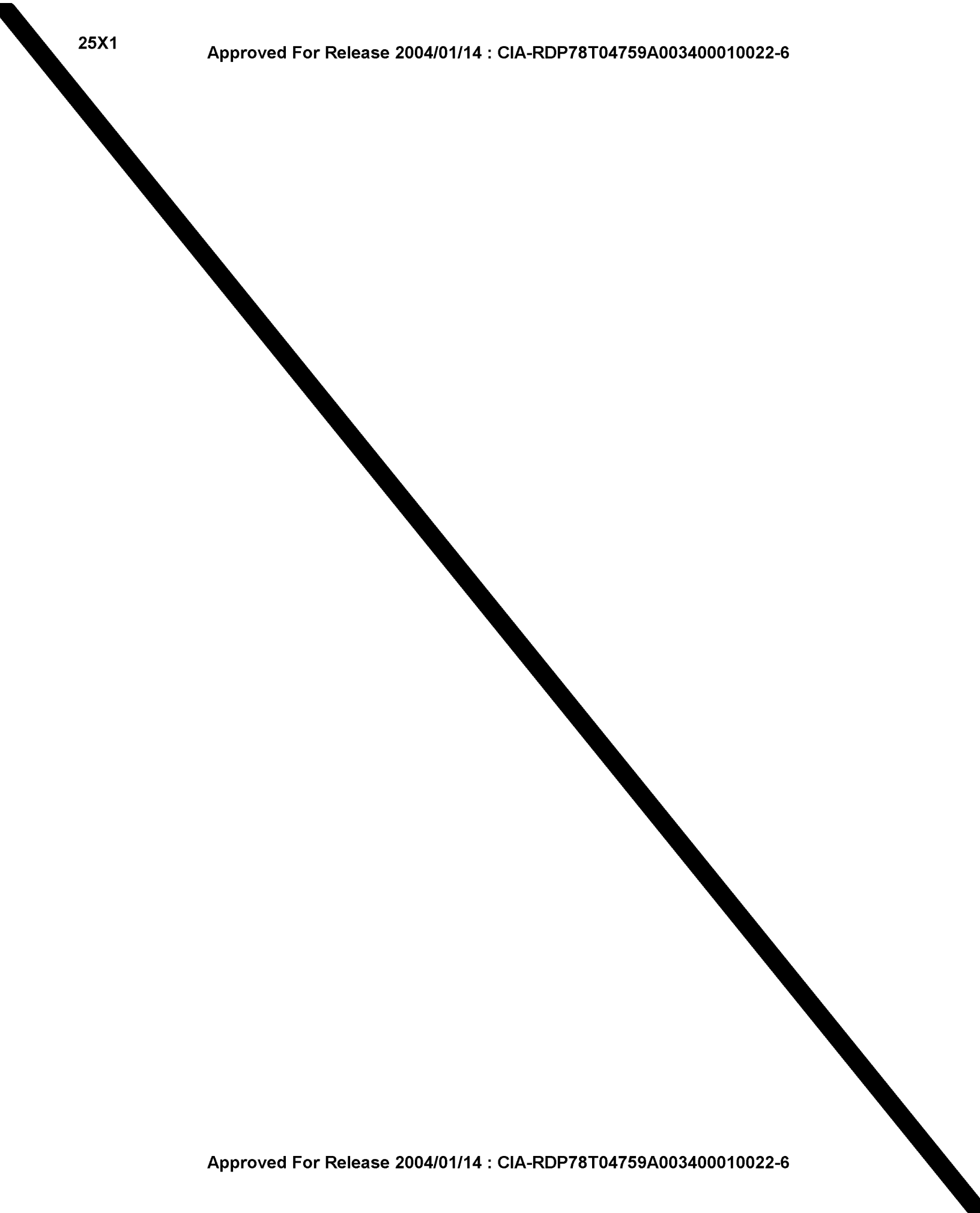
Approved For Release 2004/01/14 : CIA-RDP78T04759A003400010022-6



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GOLITSYNO HF COMMUNICATIONS RECEIVING FACILITY, USSR

INTRODUCTION

Golitsyno HF Communications Receiving Facility, USSR (55-35-45N 037-01-45E) is approximately 22 nautical miles (nm) southwest of Moscow and 2.5 nm southeast of Golitsyno (Figure 1). The principal components of this facility are 2 antenna fields with a total of 40 antennas arranged in radial patterns around each of 2 central control buildings and a road-served administration/support area.

Antenna azimuthal angles were derived from the irregular-shaped clearings in the forest. Poor photographic interpretability, poor delineation of the antenna clearings, and the wide diversity of the azimuths lead to the conclusions that all the antennas were not observed and that the azimuthal data within the required limits of plus or minus [redacted] is not possible. The azimuthal data is not better than plus or minus 5 degrees.

ANALYSIS OF FACILITY

The facility was first observed on [redacted] (Figure 2) in a very early stage of construction. One wing of the central control building at antenna site 1 was complete. At antenna site 2, the excavation for the central control building was apparent. The administration/support area contained approximately 25 buildings in various stages of construction. Evidence of antenna construction was not apparent; therefore, the facility was not operational in [redacted]

[redacted] revealed that the antennas had been erected (inferred from the clearings in the forest for the fishbone receiving antennas) and the control buildings at both antenna sites 1 and 2 were complete.

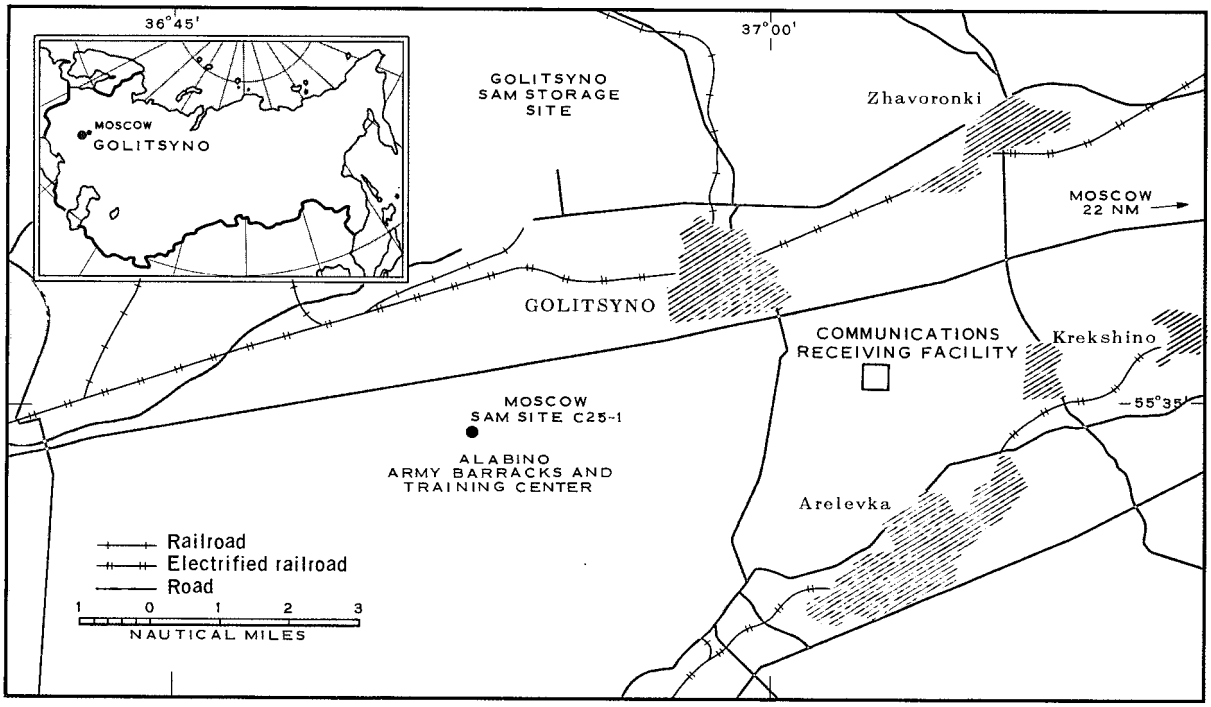

FIGURE 1. LOCATION OF GOLITSYNO HF COMMUNICATIONS RECEIVING FACILITY, USSR.

Subsequent photographic coverage of the facility (Figures 3 and 4) revealed the following:

(A) Antenna site 1 contains 15 fishbone receiving antennas, 2 possible fishbone receiving antennas, and 1 single dipole antenna. The control building now appears L-shaped.

(B) Antenna site 2 contains 18 fishbone receiving antennas and 2 pairs of probable day-night rhombic receiving antennas. The walls of the central control building may possibly be earth backfilled.

(C) The administration/support area contains a total of 47 buildings of various sizes and functions. A small motor pool is on the northern edge of the area and is probably used for the storage of construction equipment and materials. Evidence of security fencing of the administration/support area and the antenna fields is not apparent.

Additional information on the antennas in antenna sites 1 and 2 may be found in Table 1.

SUMMARY

Due to the diversity in sizes and poor azimuthal mensuration of the fishbone antenna clearings in the forest, it cannot be determined if a day-night capability exists. Evidence of paired antennas is questionable at both sites. Several evolutionary changes in antenna construction may have taken place at antenna site 2 in the northeast and southwest quadrants of the antenna field, as the forest clearings are quite irregular. The cleared area in the northeast quadrant appears to have one or more antennas which are not defined but are evidenced by the feeder traces from the central control building. Apparently, the facility has not been expanded and no additional antennas have been installed between

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Table 1. Golitsyno HF Communications Receiving Facility, Antenna Sites 1 and 2

Antenna Number	Antenna Azimuth ± 5 Degrees	Antenna Type	Possible Correspondents	Possibly Paired With Antenna Number
		Antenna Site 1		
1		fishbone	Arkhangelsk	8
2	60	fishbone	Kirov or Lvov*	13
3	70	fishbone	Perm, Tyumen, and Novosibirsk	12
4	80	possible fishbone	Minsk, Smolensk	11
5		fishbone	Undetermined	16
6		fishbone	Penza	15
7		fishbone	Murmansk or Voronezh*	18
8		fishbone	Arkhangelsk	1
9		fishbone	Sevastopol	--
10	205	dipole	Orel	--
11	255	fishbone	Minsk, Smolensk	4
12		possible fishbone	Perm, Tyumen, and Novosibirsk	3
13		fishbone	Kirov or Lvov*	2
14		fishbone	Vilnius	--

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*The primary direction of propagation may be toward either possible correspondent.

Table 1. (Continued)

Antenna Number	Antenna Azimuth ±5 Degrees	Antenna Type	Possible Correspondents	Possibly Paired With Antenna Number
			Antenna Site 1. (Continued)	
15		fishbone	Penza	6
16		fishbone	Undetermined	5
17		fishbone	Undetermined	--
18		fishbone	Murmansk or Voronezh*	7
			Antenna Site 2	
19		fishbone	Plesetsk area	--
20		probable rhombic	Undetermined	31
21		probable rhombic	Undetermined	32
22		fishbone	Vladivostok area	33
23		fishbone	Vladivostok area	34
24		fishbone	Undetermined	35
25		fishbone	Vilnius, Vitebsk	37
26		fishbone	Undetermined	--
27		fishbone	Tallinn	38
28		fishbone	Leningrad	39
29		fishbone	Leningrad area or Tambov*	40
30		fish bone	Voronezh, Stavropol or Tambov*	--
31		probable rhombic	Undetermined	20
32		probable rhombic	Undetermined	21
33		fishbone	Vladivostok area	22
34		fishbone	Vladivostok area	23
35		fishbone	Undetermined	24
36		fishbone	Smolensk, Minsk	--
37		fishbone	Vilnius, Vitebsk	25
38		fishbone	Tallinn	27
39		fishbone	Leningrad	28
40		fishbone	Leningrad area or Tambov*	29

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*The primary direction of propagation may be toward either possible correspondent.

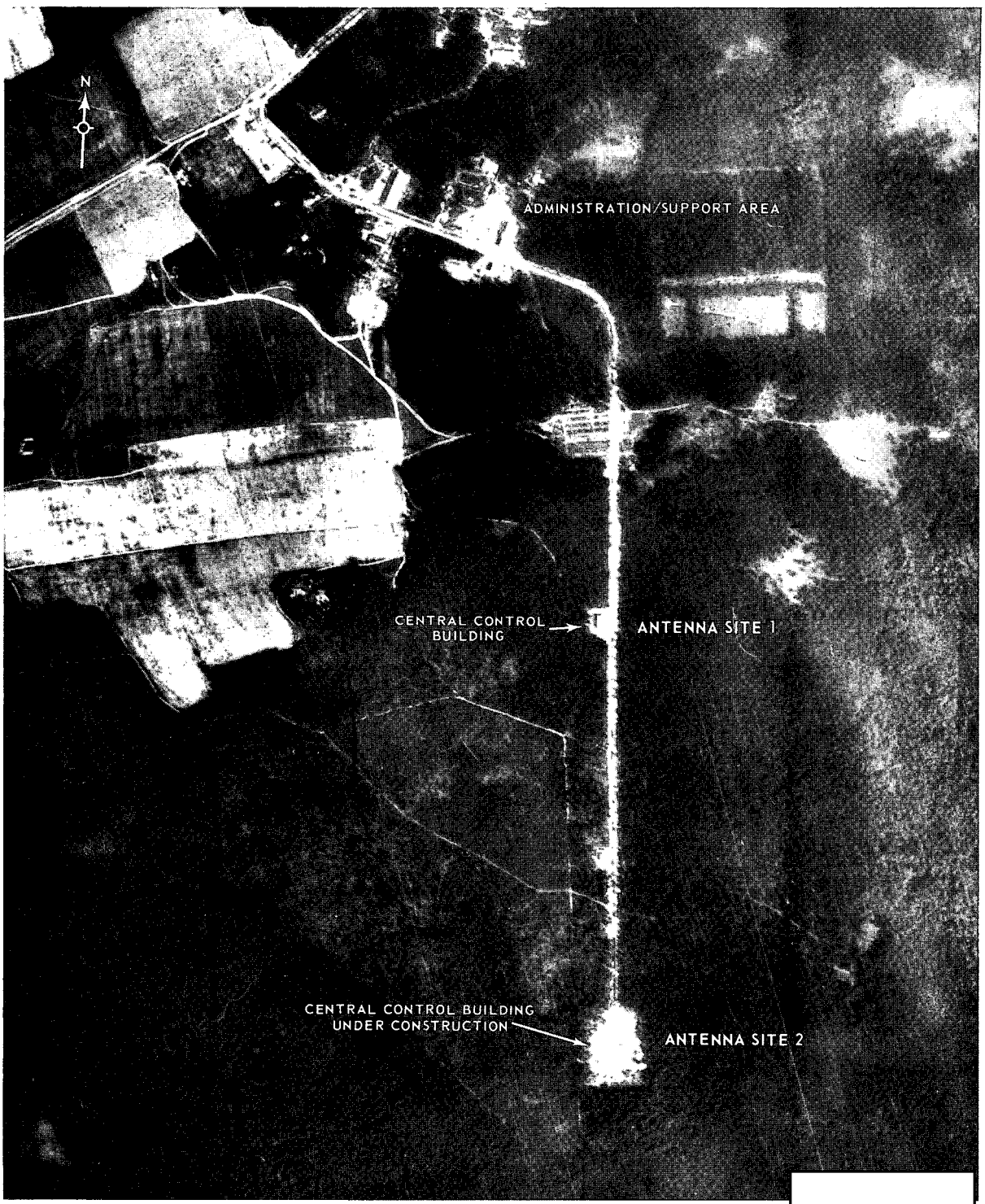

FIGURE 2. GOLITSYNO HF COMMUNICATIONS RECEIVING FACILITY UNDER CONSTRUCTION

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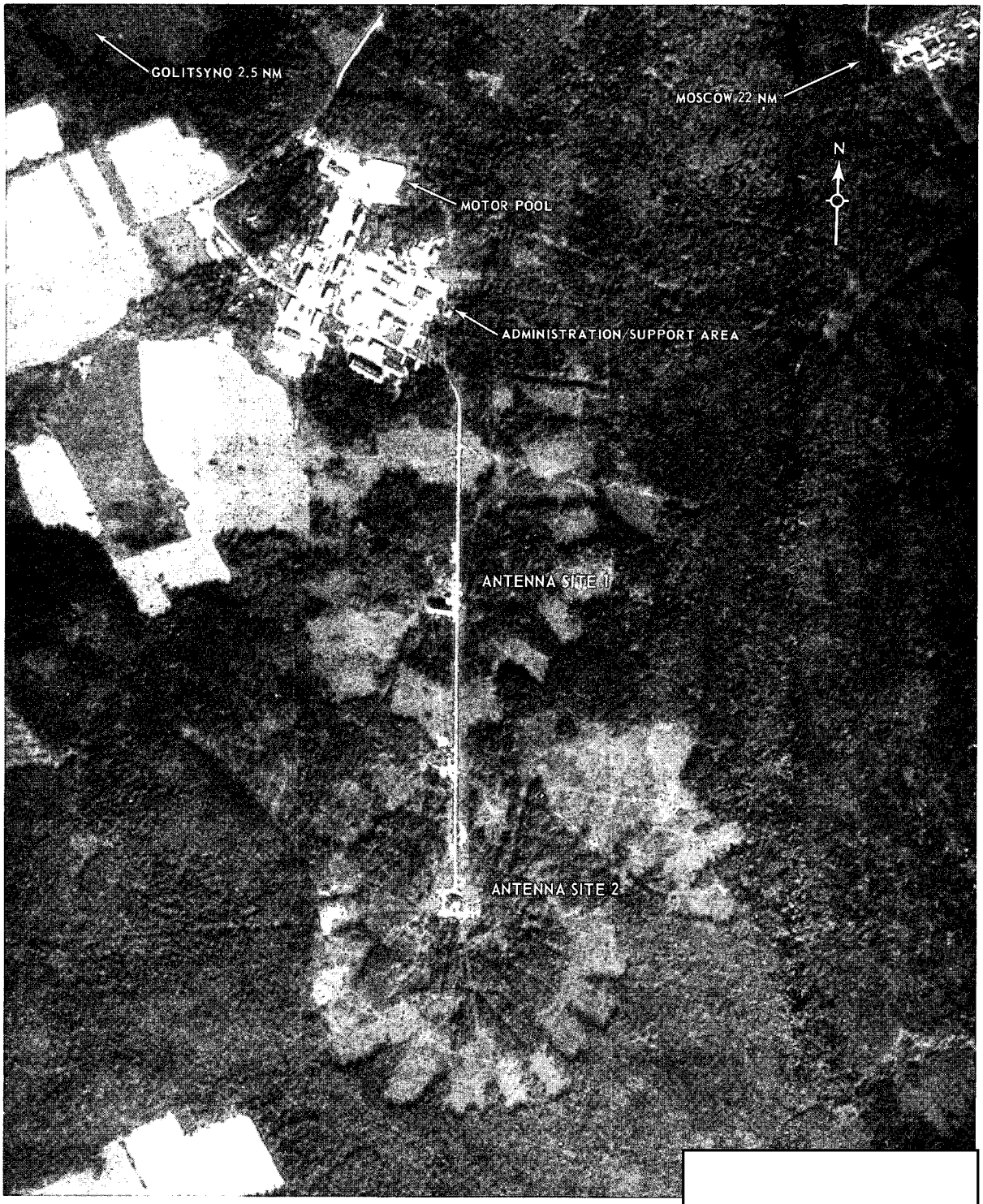

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FIGURE 3. GOLITSYNO HF COMMUNICATIONS RECEIVING FACILITY,

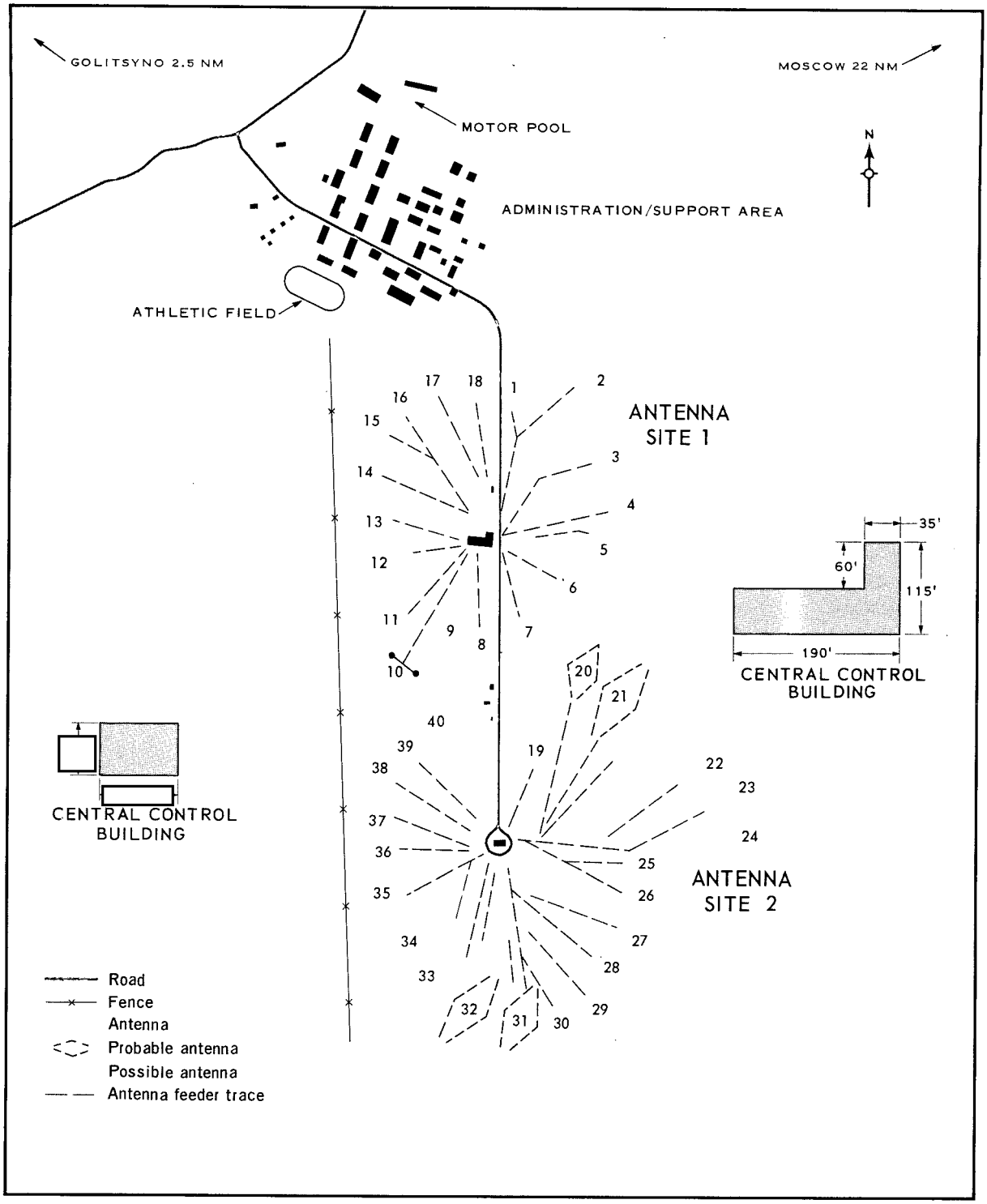

FIGURE 4. LAYOUT OF THE GOLITSYNO HF COMMUNICATIONS RECEIVING FACILITY.

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REFERENCES

MAPS OR CHARTS

US Air Target Chart, Series 200, Sheet 0167-4HL, 2d ed, Mar 63, scale 1:200,000 (SECRET)

DOCUMENT

NPIC. R-150/62, *High-Frequency Communications Receiving Site Near Golitsyno, USSR,* Oct 62 (TOP SECRET 25X
X1

REQUIREMENT

NSA. P0432/R44-65

NPIC PROJECT

11263/65